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January 1935

Test 236: John Deere D

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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT
AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 236

Dates of test: June 26 to July 2, 1935.

Name and Model of tractor: JOHN DEERE MODEL "D"

Manufacturer: John Deere Tractor Co., Waterloo, Iowa.

Manufacturer's rating: NOT RATED.

B R A K E H O R S E P O W E R T E S T S

H. P.	:Crank : :shaft :	Fuel Consumption	:*Water Consumption : : per hour gallons :	Temp. : : Deg. F. :	:Barometer
: speed:	Gals. : H. P. :Lbs. per:	For Cooling	:Cool- : :ing :	:Air :	:Inches of :Mercury
:R.P.M.:	per :hrs. per: H. P. :	and			
:	: hour : Gal. : hour :	in fuel, Total	:	:	:

*Water for the fuel mixture taken from the cooling system.

TEST B 100% MAXIMUM LOAD. TWO HOURS

41.59	:	900	:	4.329	:	9.61	:	0.724	:	2.960	:	192	:	79	:	28.815
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TEST C OPERATING MAXIMUM LOAD. ONE HOUR

40.11	:	901	:	3.955	:	10.14	:	0.686	:	2.323	:	195	:	83	:	28.820
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TEST D RATED LOAD. ONE HOUR

37.51	:	900	:	3.580	:	10.48	:	0.664	:	1.972	:	202	:	88	:	28.820
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TEST E **VARYING LOAD. TWO HOURS

37.65	:	902	:	3.599	:	10.46	:	0.665	:	--	:	204	:	87	:	
0.84	:	965	:	1.560	:	0.54	:	12.929	:	--	:	207	:	88	:	
19.64	:	942	:	2.595	:	7.57	:	0.920	:	--	:	204	:	90	:	
40.51	:	880	:	3.948	:	10.26	:	0.678	:	--	:	204	:	91	:	
10.19	:	965	:	2.198	:	4.64	:	1.501	:	--	:	204	:	90	:	
28.65	:	918	:	2.974	:	9.63	:	0.723	:	--	:	205	:	90	:	
22.91	:	929	:	2.813	:	8.14	:	0.854	:	0.898	:	204	:	89	:	28.815

**20 minute runs. Last line is average for two hours.

D R A W B A R H O R S E P O W E R T E S T S

	: Draw :	Speed :	Crank :	Slip :	Fuel Consumption		:Water:	Temp. :	
H. P.	: bar :	miles :	shaft :	on :		H. P.:	Lbs. :used :	Cool-:	:Barometer
	: pull :	per :	speed :	drive:	Gal. :	hour :	per :	Gal. :ing :	Air:Inches of
	:pounds:	hour :	R.P.M.:	wheels:	per :	per :	H.:P.:	per :	med. : :Mercury
	:	:	:	% :	hour :	Gal. :	hour :	hour :	:

TEST F 100% MAXIMUM LOAD. Second GEAR

29.90	:	2899	:	3.87	:	898	:	4.21:	:	Not Recorded	:	198	:	92:	:	28.780
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TEST G OPERATING MAXIMUM LOAD

30.74	:	4037	:	2.86	:	897	:	5.48:	:	Not Recorded	:	203	:	94:	:	28.800
29.37	:	2847	:	3.87	:	900	:	4.42:	:	" "	:	206	:	93:	:	28.810
26.69	:	1773	:	5.64	:	898	:	2.57:	:	" "	:	200	:	93:	:	28.795

TEST H RATED LOAD. TEN HOURS. Second GEAR

24.64	:	2357	:	3.92	:	900	:	3.19:	:	3.361:	:	7.33	:	0.949	:	1.831:	:	202	:	88:	:	28.830
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UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT
 AGRICULTURAL COLLEGE, LINCOLN

Copy of Report of Official Tractor Test No. 236

BRIEF SPECIFICATIONS

MOTOR: Make Own Serial No. 121132 Type 2 cylinder horizontal
 Head I Mounting Crosswise
 Bore and stroke: 6 3/4 x 7 in. Rated R.P.M. 900
 Port Diam. Valves: Inlet 2 5/16" Exhaust 2 5/16"
 Belt pulley: Diam. 13 1/4 in. Face 8 1/2 R.P.M. 900
 Magneto: Splitdorf Model 246 T
 Carburetor Schebler Model DLTX6 Size 1 1/2"
 Governor: Own No. * Type Centrifugal
 Air Cleaner: Donaldson Type Oil washed screen filter
 Lubrication: Pressure
 CHASSIS: Type 4 wheels, 2 drivers Serial No. 121132 Drive (Enclosed gear and chain)
 Clutch: Own Type double disc Operated by hand
 Advertised speeds, miles per hour: First 2 1/2 Second 3 1/2
 Third 5 Reverse 2
 Drive wheels: Diameter 46" Face 11 1/8"
 Lugs: Type Spade No. per wheel 24 Size 4 1/4" high x 3 1/4" face
 Extension rims: Width 6" Lugs Spade No. per rim 12
 Size 4 1/4" high x 3 1/4" face
 Seat Pressed steel
 Total weight as tested (with operator) 5690 pounds.

FUEL AND OIL:

Fuel: Distillate Weight per gallon 6.96
 Oil: S.A.E. #40
 Total oil to motor 4.014 gallons
 Total drained from motor 2.792 gallons
 Total time motor was operated 43 hours
 The oil was drained once - at the end of the test.

UNIVERSITY OF NEBRASKA - AGRICULTURAL ENGINEERING DEPARTMENT
AGRICULTURAL COLLEGE, LINCOLNCopy of Report of Official Tractor Test No. 236REPAIRS AND ADJUSTMENTS

No repairs or adjustments.

REMARKS

All results shown on page 1 of this report were determined from observed data and without allowances, additions, or deductions. Tests B and F were made with carburetor set for 100% maximum horsepower and these figures were used in determining the ratings recommended by the A.S.A.E. and S.A.E. tractor rating codes. Tests C, D, E, G, and H were made with an operating setting of the carburetor (selected by the manufacturer) of 96.4% of maximum horsepower.

Observed maximum horsepower (tests B & F) Drawbar 29.90 Belt 41.59

Sea level (calculated) maximum horsepower Drawbar 32.02 Belt 43.96
(Based on 60° F. and 29.92" Hg.)Highest permissible horsepower ratings Drawbar 24.02 Belt 37.37
(as recommended by A.S.A.E. and S.A.E.
codes)

The 100% maximum belt and drawbar tests were not included in reports issued from 1928 to 1934 inclusive, except in those cases where the 100% maximum setting was used throughout the complete test.

We, the undersigned, certify that the above is a true and correct report of official tractor test No. 236

Carlton L. Zink
Engineer-in-charge

E. E. Brackott

C. W. Smith

E. B. Lewis
Board of Tractor Test Engineers